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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/743,328	12/23/2003	Hideyoshi Okita	2888-101	5586

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ROTHWELL, FIGG, ERNST & MANBECK, P.C.
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SUITE 800
WASHINGTON, DC 20005

EXAMINER

STULII, VERA

ART UNIT	PAPER NUMBER
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1761

NOTIFICATION DATE	DELIVERY MODE
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09/25/2007

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PTO-PAT-Email@rfem.com

Office Action Summary

Application No.

10/743,328

Applicant(s)

OKITA, HIDEYOSHI

Examiner

Vera Stulii

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 7/06/2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9, 11-29 and 64-70 is/are pending in the application.
- 4a) Of the above claim(s) 30-63 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9, 11-29 and 64-70 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-9, 11-13, 17-29 and 67 remain rejected under 35 U.S.C. 102(b) as being anticipated by Narumiya et al (US 6,217,928).

The reference and rejection are incorporated as cited in the previous Office action.

Response to Arguments

Applicant's arguments filed July 6, 2007 have been fully considered but they are not persuasive. On page 13 of the Response to the Office action mailed February 27, 2007, applicant states that Narumiya does not teach packaging food product for freezing. Applicant is referred to Narumiya et al reference, in which Narumiya et al teach that food (boiled rice) may be placed in a freezer for freezing in a packed or non-packed state (Col. 6 lines 62-65). Narumiya et al also disclose that sushi, boiled rice or processed food with boiled rice as its main component may be frozen in a similar process (Col. 6 lines 59-61). Narumiya et al also discloses that food to be frozen is already packed before the first cooling/freezing step where packed food is being cooled to approximately 0°C (Col. 6 lines 62-65).

On page 13 of the Response to the Office action mailed February 27, 2007, applicant states that Narumiya does not teach a step of "packaging a food product to be frozen after a temperature of said food product reaches a first predetermined

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temperature". Applicant is referred to Narumiya et al reference, in which Narumiya teach that Narumiya et al also discloses that food to be frozen is already packed before the first cooling/freezing step where packed food is being cooled to approximately 0°C (Col. 6 lines 62-65). Therefore Narumiya et al reference teach food product being packaged before first freezing/cooling step in which food product reaches second predetermined temperature. Also, Narumiya discloses freezing food at normal temperature about 20 ° C, which corresponds to first predetermined temperature. As stated in the previous Office action, page 3 bottom paragraph, "In regard to claims 17-29, it is noted that "first predetermined temperature" is a room temperature before freezing which is approximately 20-25°C and is in the range recited. The "second predetermined temperature" corresponds to the "first freezing step" and the temperature in a range of 0°C to -4°C (see above). The "third predetermined temperature" corresponds to the "second freezing step" and temperature of -10°C (see above)".

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 14 and 16 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Narumiya et al (US 6,217,928) in view of Grewar (US 4,325,221).

The references and rejection are incorporated as cited in the previous Office action.

Response to Arguments

Applicant's arguments filed July 6, 2007 have been fully considered but they are not persuasive. On page 13 of the Response to the Office action mailed February 27, 2007, applicant states that Grewar reference "does not remedy this deficiency of Narumiya". Applicant is referred to Response to Arguments above.

Claims 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Narumiya et al (US 6,217,928) in view of Lamb (4,399,667).

The references and rejection are incorporated as cited in the previous Office action.

Response to Arguments

Applicant's arguments filed July 6, 2007 have been fully considered but they are not persuasive. On page 14 of the Response to the Office action mailed February 27, 2007, applicant states that Grewar reference "does not correct the deficiency of Narumiya". Applicant is referred to Response to Arguments above.

On page 14 of the Response to the Office action mailed February 27, 2007, applicant states that "nothing in Lamb teaches, suggests, or motivates one to control an incident angle as recited". Examiner respectfully disagrees. As stated in the previous Office action, Lamb discloses apparatus for chilling a plurality of food trays. Lamb discloses "chilling system for a food service cart which supports pieces of dry ice in a bunker for maximum heat transfer relative to a stream of circulating air moving through the cart" (Col. 1 lines 61-64). Lamb discloses that "the construction of the chiller

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bunker 42, with its channels 66, greatly enhances the efficiency of heat transfer since the downwardly moving cold CO₂ gas can be readily picked up by the circulating air stream from the fan 24" (Col. 4 lines 25-27). Lamb specifically discloses that the fan 24, by being positioned at an angle helps direct air into the channels 66 and under the dry ice (Col.4 lines 28-30). Therefore Lamb discloses importance of directing air at specific angle, and thus it would have been obvious to control an incident angle between dry ice in freezer and a circulation of air within the freezer to enhance the efficiency of heat transfer as taught by Lamb et al.

Claims 64-66 and 68-70 are rejected under 35 U.S.C. 103(a) as being unpatentable over Narumiya et al (US 6,217,928) in view of Woodruff et al. (US 4,522,835).

Narumiya et al is taken as cited above.

Narumiya et al do not disclose that packaging step includes deaeration or vacuum bagging.

Woodruff et al. discloses de-aeration or producing atmosphere of low oxygen concentration (Col. 2 lines 58-59) in packaging of fresh fish. Woodruff et al. discloses that frozen fish will retain red color (Col. 3 lines 34-36). Woodruff et al. discloses that this process is effective for wide variety of fish (Col. 3 lines 49-51). Woodruff et al. discloses that fish may be subjected to vacuum treatment (61-63).

Since Narumiya et al discloses freezing packaged sushi, which often contain fresh fish, and Woodruff et al. discloses packaging fresh fish products using vacuum

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and de-aeration before freezing in order to maintain fish color, one of the ordinary skill in the art would have been motivated to modify disclosure of Narumiya et al, and to employ packaging food products such as sushi using vacuum and de-aeration before freezing in order to maintain good fish color and therefore maintain its organoleptic properties. One of the ordinary skill in the art would also have been motivated to do so, since using vacuum and de-aeration were very well known techniques in the art of packaging. Since shrink-wrapping was a well known in the art alternative of vacuum packing, one of the ordinary skill in the art would have been motivated to employ shrink wrapping as a well known vacuum packing alternative.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vera Stulii whose telephone number is (571) 272-3221. The examiner can normally be reached on 7:00 am-3:30 pm, Monday-Friday.

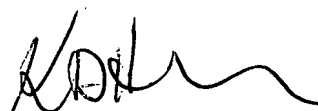
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Keith Hendricks can be reached on (571) 272-1401. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

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VS



KEITH HENDRICKS
PRIMARY EXAMINER